NOTE ON PENTATOMIDÆ.

By J. R. DE LA TORRE BUENO.

In looking up authorities for a paper I have in preparation, I find that my unamiliarity with the synonymy of the Pentatomidæ betrayed me into two errors in my paper on "The Pentatomidæ within Fifty Miles of New York," published in the September number of the JOURNAL. I made the statement in it that I had added a genus and a species to Prof. Smith's New Jersey List, viz., genus Pentatoma and species Mineus strigipes H.S. This, however, is erroneous, as Pentatoma, auctt. is the same as Liederma Uhl.; and Mineus strigipes H.S. is the same as bioculatus Fab. Will you kindly have this correction appear in the forthcoming JOURNAL, so that matters may be straightened out and the responsibility for this slip put with me, where it belongs?

ON THE SLEEPING HABITS OF SOME ACULEATE HYMENOPTERA.

By Charles T. Brues.

Recently, while looking over a series of papers by Mr. E. A. Schwarz, published some years ago, my attention was called especially to some interesting observations made by him (Proc. Ent. Soc. Wash., Vol. IV, 1, p. 24) on the sleeping habits of certain aculeate hymenoptera.* These recall very forcibly some similar observations which Mr. A. L. Melander and myself have made at scattered intervals in various parts of the country, and as ethological notes relating to the sleep of insects are rather rare in our literature, I think these are worthy of record.

The first instance relates to the common black digger wasp, *Priononyx atrata*, which is very abundant in the country about Chicago, Ill. One evening just at dusk, while collecting insects along the shore of Lake Michigan, I noticed a large sturdy specimen of the sweet clover (*Melilotus alba*) which had a considerable number of black objects clinging to the thicker portions of its branches. Just then a specimen of *Priononyx* flew wearily up to the bush, and after a second or two quietly settled down on one of the twigs among the other black objects which investigation showed to be also members of the same species. All were very loath to move and twenty-five or more wasps

^{*}Banks (JOURNAL N. Y. ENT. Soc., X, 209) has also described the sleeping nabits of some other species.

were easily picked off with the forceps before the others became aroused and gradually flew away to seek another resting place. Wasps of both sexes of this single species were represented among the captured individuals. This same species of sweet clover, which is very abundant in northern Illinois and is much sought for by various Aculeata during the day, was the center of the second observation which we had occasion to make in McHenry Co., Ill. This time several species were commingled upon the same plants. Among them were *Epcolus lunatus*, a parasitic bee; *Scolia bicincta*, *Nysson plagiatus*, a species of *Tachytes* and some other smaller wasps. In this case the *Epcolus* was the predominating form, at the hour when the plants were examined, which was just about at sundown.

It may, I think, be properly asked whether the strong scent given off at all times by the clover attracts the insects or whether they simply settle down upon the plants which they have frequented during the busier hours of the day. The fact that the *Priononyx* are not often seen on this plant in the daytime and the large numbers congregated on one bush at night would lead one to believe that they are attracted by the plant's odor as well as by the presence of their fellows which have already settled there.

Indeed each species usually has its own preference as to sleeping plant. In the case of the Texan *Scolia lecontei*, this is a species belonging to the Umbelliferæ. On any warm spring evening shortly after sunset one can collect numbers of the male Scolias resting upon or below the older umbels whose inflorescence has passed away. In nearly all cases the wasps rest with the head down; in this position their bodies harmonize well with the plant and they are not at all conspicuous. Whether this is why the same plant is always chosen would be more difficult to say. As they leave the brilliant red and yellow flowers of *Lepachys columnaris* severely alone, although resting upon these the similarly colored Scolias would be much more neatly concealed, it seems that concealment cannot be the cause of the choice.

In the common *Myzine sexcineta*, another scoliid wasp, gregarious resting habits can be observed not only late in the evening but in the middle of the day. In southern Illinois one hot day in August I noticed upon a small dried plant of a species of wild pink a large number of the males of the *Myzine* resting so thickly upon its stem and branches that they gave it a brilliant color with their con-

spicuous black and yellow bodies. A single sweep with an insect net captured some sixty or more specimens while a cloud of others flew away on being disturbed. I have also noticed similar groups of *Myzine* resting in the daytime in Massachusetts, but never so large a number on a single plant. An explanation for the gregarious habits of the male *Myzine* can readily be made when it is recalled that as the males seem to be more numerous than the females, the greater proportion of the males probably never take any active part in the economy of the species.

NEW NOCTUIDÆ FROM TROPICAL AMERICA.

By WILLIAM SCHAUS.

Lycophotia microstigma, sp. nov.

Head and abdomen grayish-buff. Collar buff posteriorly and also thorax dark lilacine brown. Primaries lilacine buff, thinly irrorated with dark scales, basal half of subcostal broadly creamy white, posteriorly shaded by dark velvety brown, which is cut by a white line crossing to base of vein 3, the brown in cell is interrupted by the orbicular which is large, round, lilacine white; the reniform small, consisting of a dark brown point beyond a lilacine white lunule; an outer curved row of dark points; some brown, shading beyond cell, and on outer margin above angle, and above vein 4; terminal triangular black spots between the veins; fringe light brown at base, terminally buff. Secondaries white; a dark interrupted terminal line. Expanse 28 mm.

Habitat: Castro, Parana.

Mamestra viriditincta, sp. nov.

Head and thorax mottled fawn color and brown. Abdomen gray with brown subdorsal tufts and lateral fawn tufts. Primaries fawn color; base of inner margin dark brown; a dentate black basal line followed by a dark patch on costa; inner line black, angled below orbicular; median space dark olivaceous mottled with black; spots large, vague, partly outlined with black and containing olivaceous scales; outer line fine black, followed by some black points on veins; outer margin mottled with olivaceous and black; terminal black points; fringe fawn color spotted with black. Secondaries white; some brown on outer margin, and the ends of veins dark. Expanse 30 mm.

Habitat: Castro, Parana.

Mamestra flavidentula, sp. nov.

Head and thorax gray; black lines on tegulæ and patagiæ. Abdomen blackishgray. Primaries gray, mottled with brown, in, beyond and below reniform; black geminate basal lines on costa, a black streak at base of median, and another near